

BRIEF EXPLANATION OF STATEWIDE PREMIUM DEVELOPMENT AND ALLOCATION PROCESS

A total statewide Self Insurance premium is developed for each line of coverage to be used in the CORA (Cost of Risk Allocation) premium development process. This amount is determined by adjusting the projected ultimate loss (which includes the allocated loss adjusting expenses) by actuarial factors supplied by ORM's actuary, discounting lines of coverage with positive cash balances and increases in net assets over 5 years, and then adding unallocated adjusting expenses, general & administrative expenses, any excess insurance costs and any deficit reduction (unfunded liability) or surplus discount (surplus fund balance) amounts by specific line of coverage to these figures. The projected ultimate loss is the estimated final amount that will need to be paid to close all claims that will occur in that line of coverage during the fiscal year. This is not the amount paid in any one particular year because many liability claims take several years to be settled.

The premium for any particular line of coverage is allocated to all agencies with exposure for that type of coverage. For example, gross payroll is the exposure base for workers' compensation coverage, total miles driven is the exposure base for auto liability, # of licensed state vehicles is the exposure base for auto physical damage, etc. (See Appendix B for each line's primary risk exposures).

The premium is allocated based on experience (losses) and exposure. Experience constitutes the total dollar value of claims charged against an agency for the past 5 fiscal year period. Exposure is reported to ORM by agency personnel. Exposure could be defined as the possibility of future loss. An agency could also have past experience and no current exposure and consequently could still be assessed a premium.

The total amount of the statewide premium is split between experience and exposure based on a set percentage. For example, workers' compensation premium is allocated 80% to experience and 20% to exposure. If the statewide premium for workers' compensation was determined to be \$10,000,000, then \$8,000,000 of premium would be allocated to experience and \$2,000,000 would be allocated to exposure. (See Appendix A for each line's ratio).

The percentage of experience and the percentage of exposure for the respective agency as a percentage of the state totals are computed and applied against the experience portion of the statewide premium and the exposure portion of the statewide premium. Using the above example, if an agency had 3% of the statewide plan ratable losses and 1% of the plan state-wide exposures, they would get 3% of the experience premium, or \$240,000, and 1% of the exposure premium or \$20,000, for a total premium of \$260,000.

The allocation of the statewide claims premium and exposure premium for each line of coverage to individual state agencies is calculated on the CORA (Cost of Risk Allocation) worksheet.

Each agency's percentage of the statewide loss-limited adjusted claims over a 5 year period is multiplied by the statewide claims premium to arrive at its claims premium. For instance, using the above premium amounts, if an agency had \$5 million of loss-limited WC claims for the 5 year period and the statewide WC loss-limited claims for that same

period totaled \$50 million, the agency's WC claims premium would be \$4 million (10% of the statewide claims premiums).

Each agency's exposure premium is calculated in a similar method. The agency's percentage of the total statewide exposures for the fiscal year is multiplied by the statewide exposure premium. For instance, if the agency's total payroll for the fiscal year is \$50 million (payroll is the exposure for WC) and the total statewide payroll is \$1 billion, the agency's WC exposure premium would be \$500,000 (5% of the statewide WC exposure premium of \$10 million).

Adding the WC claims premium of \$4 million together with the exposure premium of \$500,000 equals the total WC premium of \$4.5 million for the sample agency. Each line of coverage is calculated using the same above method.

DETAILED EXPLANATION OF THE PREMIUM DEVELOPMENT AND PREMIUM ALLOCATION PROCESS

I Statewide Premium Development

The Premium Development Committee gets together in September to determine the actuarial Self Insured premium for each line of coverage. Premiums determined during these meeting are actually for the fiscal year 2 years away. For instance, premiums developed in the September 2012 committee meeting will be billed to the various state agencies in Fiscal Year 2014. The committee is usually made up of the State Risk Director, Assistant Risk Director, the managers for the Accounting and Underwriting Units of ORM as well as the State Risk Statistical Specialist. Worksheets are completed/reviewed during the committee meeting using claims loss and expense runs provided by the Accounting department, developmental factors and ULAE amounts provided by ORM's actuary consulting firm, the cost any of excess insurance provided by Underwriting as well as amounts for general & administrative expenses and deficit/surplus fund, cash balances by line of coverage and change in net assets for the most recent 5 fiscal years by line of coverage taken from ORM's most recent financials. With the necessary data in hand the committee reviews the calculated figures from the following steps:

STEP A - The projected ultimate loss (PUL) is calculated by line of coverage for the projected premium year by taking the average of the selected PUL's for the last 5 fiscal years from the IBNR worksheet of the most recent IBNR/Reserve June 30th report. The ultimate projected loss is determined using historical data and applying development factors as in the following example for workers' compensation. Allocated loss adjustment expenses (ALAE) are included in the projected ultimate loss. ALAE are expenses that can be traced directly to the adjusting or settlement of a particular claim. The development factors are provided by our consulting actuary and are multiplied by the reported losses to arrive at the ultimate projected loss.

Actual reported loss x development factor = ultimate projected loss

Exhibit 1

<u>Year</u>	<u>Reported Losses</u>	<u>Dev. Factor</u>	<u>Proj. Ultimate Loss*</u>	<u>IBNR</u>
07/08	24,794,624	1.0735	26,615,325	1,820,701
08/09	20,118,940	1.1418	22,971,717	2,852,777
09/10	16,159,570	1.2417	20,065,060	3,905,490
10/11	17,740,609	1.3752	24,396,643	6,656,034
11/12	12,930,940	1.7713	22,903,469	9,972,529

***Rounding Differences**

Year – the State of Louisiana is on a 7/01/xx to 6/30/xx fiscal year

Reported Losses – The total of all reported losses with an accident date that falls within a particular fiscal year. A reported loss is the total amount that the adjuster expects to ultimately be paid on a claim in order to settle it, including ALAE. The reported loss is on the accrual basis and is not the amount paid in the previous year or the amount that is expected to be paid in the current year.

Development Factors – The multiplier used to calculate the projected ultimate loss. The number is provided by the consulting actuary.

IBNR (Incurred But Not Reported) – In Exhibit 1 above, IBNR is the difference between the reported losses and the projected ultimate losses. In reality, IBNR represents claims for insured events that have occurred but have not yet been reported. IBNR claims include (a) known loss events that are expected to later be presented as claims, (b) unknown loss events that are expected to later be presented as claims, and (c) expected future development on claims already reported. The final IBNR figure is chosen from the Bornhuetter Ferguson method.

STEP B - Adjust for Inflation Factor – The projected ultimate losses are in today's dollars; consequently, the losses determined in step A need to be inflated depending on how far in the future the projection is being made and the line of self-insured coverage. At the Office of Risk Management we project premiums approximately two years in advance. For example, if our consulting actuary provided a 10% annual inflation factor for workers' compensation, we would multiply the projected ultimate loss times 1.21 (1.10×1.10) to arrive at the inflated amount.

STEP C – Calculate the Reserve Discount Rate. Premiums for lines of coverage with surplus cash balances can possibly be discounted to account for the fact that there are available cash reserves to pay for claims along with any future premiums charged. The first step to develop the discount rate is to calculate minimum cash needs required to start the new fiscal year. 10% of the approved budget, excluding approved authority for excess insurance premiums (For FY 2014 premiums, FY 2013 budget is used) has been determined to be the necessary base used for the minimum cash needs amount. For example, if the approved budget for a fiscal year is \$140 million (before any excess premiums are considered), the minimum cash needs amount would be \$14 million.

Next, Accounting determines the "Carryover Cash Surplus" amount at the beginning of the year. Accounting reduces any cash balances carried over from the prior fiscal year by funds designated for a specific purpose (such as Survivor Benefits/Katrina Excess Insurance cash). For example, if ORM had \$50 million of cash carryover but \$26 million of that amount was designated for specific areas, only \$24 million would be used to calculate the carryover cash surplus. Using the \$14 million minimum cash needs figure in the example above, the surplus cash amount would be \$10 million (\$24 million minus \$14 million). This surplus amount will be spread out across those lines of coverage with positive changes in Net Assets during the most recent 5 fiscal years (FY 2008–FY 2012 for FY 2014 premiums), based upon the percentage of each line's positive increase in net assets to the total positive increase in net assets for only lines with positive increase in Net Assets. Any lines of coverage with a negative change in net assets for the last 5 years are excluded from the process of allocating the cash surplus amount.

For example, if Med Mal had a \$20 million increase in net assets over the last 5 years and the total increase in net assets for all lines with positive net asset increases totaled \$40 million, 50% of the cash surplus amount would be offset against Med Mal premiums. Using the \$10 million cash surplus amount above, the premium developed in Step B for Med Mal would be reduced by \$5 million. This reduction occurs by "discounting" the Med Mal premium in Step B by the appropriate percentage to remove \$5 million from the premium. If the Med mal premium calculated in Step B totaled \$35 million, the % discount would be 1 minus the cash surplus reduction (\$5 million) divided by the premium amount

of \$35 million, or $1 - (5,000,000 / 35,000,000)$, which results in the figure .85714285715. Multiplying the premium of \$35 million by the discount factor of ~.8571429 equals ~\$30 million.

Each of the other lines with positive net assets growth over the last 5 fiscal years would have its inflation adjusted premium developed in Step B above reduced by its share of the total net asset positive change in the same manner.

Lines of coverage with no increase in net assets or a negative change in net assets for the past 5 fiscal years are given a reserve discount factor of 1.000. Any line of coverage with positive changes in net assets whose inflation-adjusted PUL amount is less than the calculated cash surplus reduction amount is given a discount factor of 0.000 so that the discounted net premium will not be a negative amount. For those lines of coverage with 0.000 discount rates, the only premiums charged will be for overhead expenses from ULAE and general & administrative costs, adjusted for any deficit/surplus amortization amounts.

(Note: Step C has not been completed for several of the past fiscal years, and it is not anticipated to be used in the future due to low cash balances)

STEP D – Add Estimated Unallocated Loss Adjustment Expenses (ULAE) – These are claim expenses that cannot be traced to a particular claim, but can be attributed to a particular line of coverage. ORM’s Accounting department uses the budget from the upcoming fiscal year (FY 2014 statewide premiums developed using FY 2012 claims and exposures used the projected budget figures for FY 2013 to develop the ULAE) to arrive at the total “overhead” expenses that are not related to claim loss payments or adjusting/legal expenses tracked to individual claims. The general & administrative expenses from the final year-end financial statement are backed out from the total budgeted overhead expense amount. Accounting then allocates any remaining ULAE expenses specific to a particular line of coverage, such as for the SIF premium for WC or Elevator Tech for GL. After grouping all coverage-specific ULAE expenses by line, the sorted ULAE schedule is submitted to the ORM actuary, who then allocates any remaining ULAE expenses not allocated to a specific line of coverage to the appropriate lines of coverage. After completing the necessary allocations, the actuary sends ORM the final ULAE allocation schedule for each line of coverage. These ULAE figures are entered into the statewide premium development schedule.

STEP E – Add General & Administrative Expenses – These are non-claim related expenses and would encompass expenses such as the risk manager’s salary, accounting expenses, loss prevention expenses, etc.. These amounts come directly from the most recent year-end financial statement and were deducted from the budgeted overhead amounts in STEP D above. These expenses are adjusted for inflation.

STEP F – Add Cost of Excess Coverage – The cost of commercial policies that provide coverage above the self-insured amount that is retained. Since most lines no longer have excess coverage, and those lines that do usually spread the excess premium amount to each location/agency separate from the CORA SI allocation process, excess premiums are no longer included in the statewide premium totals.

STEP G – Add for Deficit/Surplus Adjustment – Deficit or Surplus fund balances exceeding a determined amount are amortized over a 20 year period to attempt to

“smooth out” the premiums charged. For example, if WC has a fund deficit of \$200 million, an additional \$10 million of premium would be added to the cumulative annual premium developed through STEP F (\$200 million/20 years). If Med Mal has a fund surplus of \$100 million, \$5 million would be deducted from the cumulative premium developed through STEP F (\$100 million/20 years).

II Premium Allocation

After determining the actuarial Self Insured premium for each line of coverage during the premium development committee meeting, the statewide premium amounts to be allocated through the CORA (Cost of Risk Allocation) process to individual agencies are determined. The following is a brief explanation of how the CORA process determines what each agency is to be billed for each line of coverage relevant to that particular agency:

STEP A – Experience/Exposure splits – As stated in the brief explanation at the beginning, the total premium to be allocated is split between the experience and exposure. For example, ORM allocates 80% of the workers’ compensation premium to experience and 20% to exposure (regular payroll). (See Appendix A for the split for each line of coverage).

ORM weighs more heavily on experience for lines of coverage where we have a good claims history and the claims are more preventable in nature; such as workers’ compensation. In the property line, since property claims are for the most part uncontrollable, we weigh property damage 20/80 (experience/exposure).

STEP B – Experience – ORM captures experience for the previous five years and allocates the experience portion of the premium on the past five years of ratable losses.

Per Claim Loss Limits are calculated by line by location in order to prevent a catastrophic loss from dramatically increasing a location’s premium. The formula for the loss limit calculation is as follows:

$(\text{Location Losses} / \text{Total State Losses}) \times \text{Retention Level} = \text{per claim loss limit}$

For example, the calculated loss limit for a State agency is as follows:

$(\$7,465,445 / \$44,958,030) \times \$1,000,000 = \$167,000 \text{ per claim loss limit}^{**}$

**** Rounded up to next highest 1,000 level for example below**

To show an example of how loss-limiting works, assume the following claims were charged against a location with the above loss limit of \$167,000, the ratable loss amount would be calculated as follows:

	<u>Gross Claim Amt.</u>	<u>Per Claim Ratable Amt.</u>
1	\$275,000	\$167,000
2	\$150,000	\$150,000
3	\$169,000	\$167,000
4	\$167,000	\$167,000
5	<u>\$ 10,000</u>	<u>\$ 10,000</u>
	\$771,000	\$661,000

The location would not be charged with the total \$771,000 of losses because of the \$167,000 per claim loss limit. The \$661,000 of total ratable claim losses would be divided by the statewide ratable losses for that coverage and then multiplied by the statewide experience premium for that coverage to arrive at the individual agency's experience premium portion of its total premium for that coverage.

STEP C - The exposure base that ORM uses for a particular line is the one that measures the risk of loss and is easily obtainable from all state agencies. For example, the exposure base for workers' compensation is payroll dollars, total vehicle mileage for automobile liability, total compensation (including imputed payroll for board members) for general liability, # licensed vehicles for auto physical damage, total medical malpractice contacts for medical malpractice, etc. We do not use NCCI classification codes for workers' compensation because of the problems of classifying employees and collecting the information from hundreds of reporting locations.

An individual agency's exposure premium portion of its total premium is determined in the same manner as the experience portion described above, except that there is no adjustment to the reported exposures. The agency's total primary exposures are divided by the statewide primary exposure for that line of coverage and then multiplied by the statewide exposure premium for that line of coverage to arrive at the agency's exposure premium portion of its total premium. The experience premium determined above is added to the exposure premium to arrive at the agency's total premium.

III Final Premium Billing Determination

Once the premium allocation is completed, the self insured premium amounts are added together with any commercial premium for that agency as determined by the Underwriting Department. These Recommended Premiums are then submitted to the Office of Planning & Budget (OPB). The OPB submission date is October 1.

OPB has requested that the ORM Recommended premiums be reduced with the resulting premium called the self-insured "OPB Budgeted Premium" or "Cash Needs Premium". Only the self insured premiums are reduced by a proportional amount since the commercial premiums apply to specific agencies. ORM will receive the final billing amount each agency is to be charged from OPB once the legislature approves that fiscal year's budget.

The SI premiums by line for each billed agency from the CORA worksheet are transferred to an Excel spreadsheet. Then, ORM calculates the “Cash Needs” premiums for each line of coverage by multiplying the CORA recommended premiums for each SI line of coverage by a constant percentage that excludes any deficit/surplus adjustment amounts or road hazard premium amounts.

ORM’s underwriting department develops the commercial premium amounts for Wet Marine coverage, along with commercial coverages for the Superdome/Arena, as well as the total excess property and boiler premium amounts. SI Aviation premiums are also developed by the underwriting department. These premiums are excluded from the CORA worksheet process. They are added in with the SI premiums for the CORA worksheet on the Excel spreadsheet.

Small Boards & Commissions- 15 years ago, several agencies’ premiums were protected from increases. Starting in FY 2014, these agencies’ claims and exposures were included in the CORA worksheet process. In order to minimize premium increases from their protected premium amounts, it was agreed that the new premium for FY 2014 could not be more than double their old billed premium amount. For any of these locations with Cash Needs premiums exceeding double their old protected premium amount, a reduction must be made to the original cash needs premiums determined by CORA. This reduction causes the original recommended premiums to be changed for these locations as well.

The Loss Prevention unit of ORM submits a list of the agencies’ safety audits listing the agencies that passed or failed their audits. Those agencies that passed receive a 5% credit off of every line of self-insured coverage premium (other than medical malpractice/road hazards). If an agency fails the safety audit, it receives a 5% penalty which is added to its self-insured premium totals. Some agencies receive neither a credit nor penalty if they were not audited by the Loss Prevention Unit.

The final billing invoices reflect the adjusted premium amount for each line of coverage after the safety audit credit/penalty adjustment is made. The Underwriting department of ORM is responsible for mailing out the invoices to the respective agencies. The Accounting Department is responsible for the collection of the billed premiums.

There is a 2 year lag from when claims and exposures are reported/collected by ORM from agencies and when the premiums for those claims/exposures are actually billed/invoiced. For instance, the claims for premiums billed for FY 2013 actually come from claims incurred during fiscal years 2007 through 2011 (starting 7/1/2006 through 6/30/2011); the exposures for premiums billed in/for FY 2013 actually come from exposures reported to ORM for fiscal year 2011.

APPENDIX A - Experience/Exposure Split by Line of Coverage

	<u>Experience</u>	<u>Exposure</u>
Workers' Compensation	80%	20%
General Liability	70%	30%
Automobile Liability	70%	30%
Auto Physical Damage	70%	30%
Boiler & Machinery	35%	65%
Property	20%	80%
Bonds	50%	50%
Crime	0%	100%
Medical Malpractice	70%	30%
Road & Bridge**	100%	0%

**** Premiums not billed**

APPENDIX B - Exposure Items by Line of Coverage

Workers' Compensation	Annual Gross Payroll
General Liability	Total Compensation - Annual Gross Payroll + # of outside board members (4th qtr.) X \$15,000
Automobile Liability	Total Mileage – Total Annual Public vehicle miles + 5% of total annual private vehicle miles
Auto Physical Damage	# of licensed state vehicles reported for 4th quarter
Boiler & Machinery	Total Boiler Value
Property	Total Property Value
Bonds	# of FTE's for 4th quarter (# FT EE's + .5PT EE's), plus # of outside board members for 4th quarter
Crime	Peak Exposure for 4th quarter
Medical Malpractice	Total Med Mal Contacts – available upon request
Road & Bridge**	None

**** Premiums not billed**